UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/809,405	03/15/2001	Frank Rademacher	964-010251	3576

28289 7590 03/21/2006

THE WEBB LAW FIRM, P.C.
700 KOPPERS BUILDING
436 SEVENTH AVENUE
PITTSBURGH, PA 15219

EXAMINER	
SENFI, BEHROOZ M	

ART UNIT	PAPER NUMBER
2621	

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/809,405	RADEMACHER ET AL.	
	Examiner	Art Unit	
	Behrooz Senfi	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8 and 10-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 10-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/30/2005 has been entered.

Claim 9 has been canceled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-8, 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lanza et al (US 5,938,710) in view of Rosinski et al (US 5,793,308).

Regarding claim 1, Lanza '710 teaches, an industrial truck (i.e. fig. 1, 100), comprising: a driver's seat located in a driver's cab, the driver's seat oriented in the forward direction (i.e. fig. 1, shows the seat, which is in forward direction), and a first camera pointing toward the rear (i.e. fig. 1, camera 3), the first camera mounted on the rear of the vehicle to the rear of the driver's seat (fig. 1, camera 3). Furthermore, Lanza

'710 teaches (i.e. fig. 3, cameras 1 and 3, abstract, col. 5, lines 46 – 54) a navigation system including navigation camera for monitoring the surrounding area and are used with aid of an image processing system to be operated manually and/or automatically.

Lanza '710 is silent in regards to, at least one additional camera is mounted on the rear of the vehicle to the rear of the driver's seat and on an upper segment, at a height greater than the first height, wherein the first camera provides a view of a distant area and the at least one additional camera provides a view of a near area behind the industrial truck, and wherein the image taken with the first camera and/or the image taken with the at least one additional camera can be displayed on the screen located in the vicinity of the drivers seat.

However such features are well known and used as evidenced by Rosinski '308 (i.e. figs. 5B, 7A, 8B and 11B), which teaches camera arrangements in different type of vehicle for viewing and monitoring at different angles, and also teaches that the images captured by the cameras can be selectively displayed to the operator (i.e. fig. 1, display 3, col. 3, lines 33 - 41).

Taking the combined teaching of Lanza and Rosinski as a whole, it would have been obvious to one skilled in the art at the time of the invention was made to modify the navigation system of Lanza '710, by incorporating multiple cameras for monitoring the surrounding vehicle from different angle and display the images to the vehicle operator, as suggested by Rosinski, to allow a vehicle operator to view blind spots at the rear end sides of the vehicle (col. 2, lines 59 – 62).

It is noted that, Lanza is silent in regards to counterweight located on a rear of the truck. Howerver, Official Notice is taken to note that this type of vehicle must necessarily have a counterweight (which can be a part of the frame) in order to keep the vehicle balanced.

Regarding claim 2, combination of Lanza and Rosinski teaches, wherein there are two additional cameras to view the near area (i.e. col. 4, lines 14 – 15 of Rosinski).

Regarding claim 3, it is noted that combination of Lanza and Rosinski is silent in regards to, camera equipped with a wide-angle lens, as claimed. Examiner takes Official Notice to note that, the use of wide-angle lens in the camera is notoriously well known and conventional for the benefit of covering larger area in video navigation and/or monitoring. Therefore, it would have been obvious to one skilled in the art at the time of the invention was made to implement such teaching as they are notoriously well known, to view or cover larger area under camera monitoring.

Regarding claim 4, combination of Lanza and Rosinski teaches, wherein the screen is effectively connected with a switching device by which the far area viewed by the first camera or the near area viewed by the at least one additional camera can be selectively displayed on the screen as desired (i.e. col. 7, lines 8 – 15 of Rosinski).

Regarding claims 5 – 6, the limitations claimed have been analyzed and rejected with respect to claim 4 above.

Regarding claims 7 – 8, wherein the screen is effectively connected with an

image mixer by which the images taken by the two additional cameras are superimposed on each other on the screen (i.e.figs. 2 – 3, CPU 21 and MCU 211, col. 3, lines 30 – 32, col. 6, lines 4 – 6 of Rosinski).

Regarding claim 10, the limitations claimed have been analyzed and rejected with respect to claim 1 above.

Regarding claim 11, the limitation "screen is located inside a driver cab" is similar and has the same functionality as to the screen as taught by Rosinski, and discussed earlier with respect to claim 1 above.

Regarding claims 12 - 13, combination of Lanza and Rosinski teaches, wherein the industrial truck has a steering device with an electrical steering sensor (i.e. fig. 1, device 4, col. 1, lines 55 – 60, col. 2, lines 23 – 26 and col. 5, lines 57 – 67 of Rosinski).

Regarding claim 14, combination of Lanza and Rosinski teaches, screen display, for displaying images captured by the camera to the vehicle operator, as discussed with respect to claim 1 above. However, it is noted that combination of Lanza and Rosinski is silent in regards to screen is the form of a "flat screen". Examiner takes Official Notice to note that, the use of a flat screen is well known and conventional in the prior art of the record. Therefore, it would have been obvious to one skilled in the art at the time of the invention was made to use a flat screen as an alternative screen, for providing images captured by the camera to the vehicle operator.

Regarding claim 15, combination of Lanza and Rosinski teaches, fork lift truck (i.e. fig. 1, truck 100 of Lanza).

Contact

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(571) 272-7339.**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Mehrdad Dastouri** can be reached on **(571) 272-7418.**

Hand-delivered responses should be brought to Randolph Building, 401 Dulany Street, Alexandria, Va. 22314.

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is **(571) 272-6000,**

Or faxed to:

(571) 273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

B.M.S.

3/19/2006

VU LE
PRIMARY EXAMINER